

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference HP/5 - 22816/C	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/EP 03/50954	International filing date (day/month/year) 08/12/2003	(Earliest) Priority Date (day/month/year) 18/12/2002
Applicant CIBA SPECIALTY CHEMICALS HOLDING INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/50954

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1 (partially), 2-4, 14-17, 19, 20

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1(partially), 2-4,14-17,19,20

Use of 3-arylbenzofuranones as antioxidants in food compositions.

2. claims: 1(partially), 5-7, 14-20

Use of organic N,N-dialkylamines as antioxidants in food compositions.

3. claims: 1 (partially), 8, 14-20

Use of substituted hydroxylamines in foods compositions.

4. claims: 1 (partially), 9 , 14-20

Use of nitrones in food compositions

5. claims: 1 (partially) 10- 20

Use of amine oxides in food compositions.

INTERNATIONAL SEARCH REPORT

National Application No

PCT/EP 03/50954

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A23L3/34 A23L3/35 A23K1/16 C11B5/00 A23D9/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A23L A23K C11B A23D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, FSTA, BIOSIS, CHEM ABS Data, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 346 630 B1 (ZINGG JUERG ET AL) 12 February 2002 (2002-02-12) column 1, paragraph 5 - column 13, line 65 column 23, paragraph 2 column 26, paragraph 21-55 -----	1-4, 14-17, 19,20
X	US 6 359 148 B1 (ZINGG JUERG ET AL) 19 March 2002 (2002-03-19) column 1, paragraph 5 - column 13, line 53 column 23, paragraph 2 column 26, lines 16-50 ----- -/--	1-4, 14-17, 19,20

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

22 June 2004

Date of mailing of the international search report

15 OCT 2004

Name and mailing address of the ISA

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Rooney, K

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50954

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NIISHIYAMA, T., SHIOTSU, S., AND TSUJITA, H.: "Antioxidative activity and active site of 1,3-indandiones with the beta-diketone moiety" POLYMER DEGRADATION AND STABILITY, vol. 76, June 2002 (2002-06), pages 435-439, XP002280823 GBBARKING page 435, column 1, paragraph 1 - column 2, paragraph 3	1-4, 14-17, 19,20
X	----- EP 0 867 467 A (GEN ELECTRIC) 30 September 1998 (1998-09-30) page 10, lines 48,49 page 11, lines 11-14 -----	1-4, 14-17, 19,20

INTERNATIONAL SEARCH REPORT

Information on patent family members

National Application No

PCT/EP 03/50954

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6346630	B1	12-02-2002	CH 686306 A5 29-02-1996
			US 5955619 A 21-09-1999
			US 5814692 A 29-09-1998
			US 5773631 A 30-06-1998
			AT 404941 B 25-03-1999
			AT 176994 A 15-08-1998
			BE 1008613 A4 04-06-1996
			BR 9403589 A 16-05-1995
			CA 2132131 A1 18-03-1995
			CN 1106809 A ,B 16-08-1995
			CN 1191229 A ,B 26-08-1998
			CZ 9402263 A3 12-04-1995
			DE 4432732 A1 23-03-1995
			ES 2112140 A1 16-03-1998
			FR 2710063 A1 24-03-1995
			GB 2281910 A ,B 22-03-1995
			HK 1005619 A1 15-01-1999
			IT MI941891 A1 17-03-1995
			JP 3023586 B2 21-03-2000
			JP 7233160 A 05-09-1995
			NL 9401507 A ,B, 18-04-1995
			RU 2134689 C1 20-08-1999
			SE 9403091 A 18-03-1995
			SG 52428 A1 23-05-2000
			SK 110594 A3 07-06-1995
			US 5516920 A 14-05-1996
US 6359148	B1	21-09-1999	CH 686306 A5 29-02-1996
			US 5814692 A 29-09-1998
			US 5773631 A 30-06-1998
			US 5955619 A 21-09-1999
			US 6346630 B1 12-02-2002
			AT 404941 B 25-03-1999
			AT 176994 A 15-08-1998
			BE 1008613 A4 04-06-1996
			BR 9403589 A 16-05-1995
			CA 2132131 A1 18-03-1995
			CN 1106809 A ,B 16-08-1995
			CN 1191229 A ,B 26-08-1998
			CZ 9402263 A3 12-04-1995
			DE 4432732 A1 23-03-1995
			ES 2112140 A1 16-03-1998
			FR 2710063 A1 24-03-1995
			GB 2281910 A ,B 22-03-1995
			HK 1005619 A1 15-01-1999
			IT MI941891 A1 17-03-1995
			JP 3023586 B2 21-03-2000
			JP 7233160 A 05-09-1995
			NL 9401507 A ,B, 18-04-1995
			RU 2134689 C1 20-08-1999
			SE 9403091 A 18-03-1995
			SG 52428 A1 23-05-2000
			SK 110594 A3 07-06-1995
			US 5516920 A 14-05-1996
EP 0867467	A	30-09-1998	US 5922794 A 13-07-1999
			CN 1195671 A 14-10-1998
			EP 0867467 A1 30-09-1998

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/50954

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0867467	A	ID 20099 A	01-10-1998
		JP 10338815 A	22-12-1998
		ZA 9802113 A	14-09-1998
